

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Please cancel claims 1-22, without prejudice or disclaimer, and add the following new claims:

23. (new) A process for preparing neolignan by DDQ mediated dimerisation of dihydroasarones of calamus oil (*Acorus calamus*), said process comprising:

(a) mixing the dihydroasarone of formula (I) with DDQ and organic solvent at room temperature for 15-20 hrs to yield a precipitated solid DDQH<sub>2</sub>,

(b) filtering the precipitate obtained in (a) and washing the precipitate twice with organic solvent,

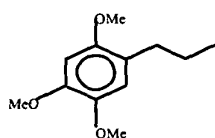
(c) evaporating the organic solvent in (b) from the precipitate to produce a residue,

(d) mixing the obtained residue of (c) with water,

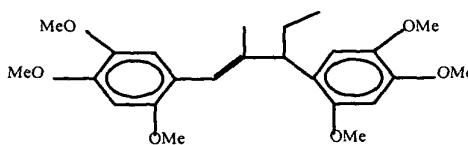
(e) extracting the aqueous solution of (d) with aliphatic halogenated hydrocarbon and separating the organic layer from the aqueous layer,

(f) washing the organic layer of (e) with brine and 10% sodium bicarbonate, followed by a second washing with brine, and drying with sodium sulphate to recover a residue, and

(g) purifying the dried residue obtained in (f) over a silica gel column by mixing with a mixture of hexane:methanol to recover three crystallized fractions, wherein the three fractions obtained are (a)  $\alpha$ -asarone, (IIa; 9%); (b) 1-(2,4,5-trimethoxy)phenyl-1-propanone (IIb, 22%); (c) a Neolignan [3-ethyl-2-methyl-3-(2'', 4'', 5''-trimethoxy)phenyl-1-(2',4',5'-trimethoxy)phenyl-1-propene]; (II, 32%).



I



II

24. (new): A process as claimed in claim 23, wherein the organic solvent in (a) is acetic acid or propionic acid.

25. (new): A process as claimed in claim 23, wherein the organic solvent in (a) is acetic acid.

26. (new): A process as claimed in claim 23, wherein the organic solvent in (b) is acetic acid.

27. (new): A process as claimed in claim 23, wherein the aliphatic halogenated hydrocarbon in (d) is dichloromethane, carbon tetrachloride or chloroform.

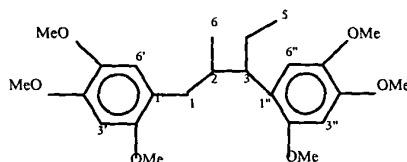
28. (new): A process as claimed in claim 23, wherein the aliphatic halogenated hydrocarbon in (d) is dichloromethane.

29. (new): A process as claimed in claim 23, wherein the effective molar ratio of dihydroasarone and DDQ in (a) is in the range of 1:1 to 1:1.2.

30. (new): A process as claimed in claim 23, wherein the neolignan obtained in (g) is NEOLASA-I.

31. (new): A process as claimed in claim 23, wherein the dihydroasarone is obtained from isolated Asarones from crude calamus oil by loading on silica gel column and eluting with organic solvents and hydrogenating with solvents along with 10% palladium on activated charcoal, optionally along with ammonium formate under pressure in range of 10-40 psi at room temperature.

32. (new): A process as claimed in claim 30, wherein NEOLASA-I is further hydrogenated to yield dihydroneolignan 3-ethyl-2-methyl-3-(2'', 4'', 5''-trimethoxy)phenyl-1-(2', 4', 5'-trimethoxy)phenyl propane of formula (III).



III

33. (new): A process as claimed in claim 32, wherein the dihydroneolignan has two asymmetric centers.

34. (new): A process as claimed in claim 32, wherein the dihydroneolignan is capable of undergoing conversion into several naturally occurring neolignans and lignan derivatives.

35. (new): A process as claimed in claim 32, wherein the dihydroneolignan can be evaluated for biological activity.